

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 15.04.2013
Date of Reporting : 16.04.2013

I. Regional Availability/Demand:

Demand Met	Evening Peak (20:00 Hrs) MW			Demand Met	Off Peak (03:00 Hrs) MW			Day Energy (Net MU)	
	Shortage	Requirement	Freq* (Hz)		Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
33013	2820	35833	50.18	28446	730	29176	50.28	716.8	48.40

* Half hourly (two 15 minutes block—one block each before and after the designated time) average frequency

II. A. State's Load Details (At States periphery) in MUs:

State	State's Control Area Generation (Net MU)				Drawal Schedule (Net MU)	Actual Drawal (Net MU)	UI (Net MU)	Consumption (Net MU)	Shortages* (MU)
	Thermal	Hydro	Renewable/others \$	Total					
Punjab	51.34	7.26		58.60	39.28	41.31	2.03	99.90	2.62
Haryana	53.49	0.64		54.13	41.69	42.15	0.46	96.28	0.54
Rajasthan	88.66	0.09	6.59	95.34	46.80	46.51	-0.30	141.85	1.17
Delhi	25.71			25.71	53.36	49.62	-3.74	75.33	0.00
UP	116.55	3.47	19.20	139.22	78.77	78.33	-0.44	217.55	41.07
Uttarakhand		10.27		10.27	20.03	20.37	0.34	30.64	1.30
HP		10.75		10.75	11.78	10.20	-1.58	20.95	0.00
J & K		10.45	0.00	10.45	20.89	19.68	-1.21	30.13	1.70
Chandigarh				0.00	3.94	4.17	0.23	4.17	0.00
Total	335.76	42.91	25.79	404.47	316.54	312.33	-4.22	716.79	48.40

* Shortage furnished by the respective constituent.\$ Others include UP Co-generation and JK Diesel

II. B. State's Demand Met in MWs:

State	Evening Peak (20:00 Hrs) MW				Off Peak (03:00 Hrs) MW				Day Energy MU
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	
Punjab	4744	205	182	-93	4069	0	119	-93	-2.17
Haryana	5120	329	273	63	3617	0	-66	-363	-5.45
Rajasthan	6298	67	32	313	5588	0	-79	179	4.83
Delhi	3503	0	-174	-295	2481	0	-237	-891	-13.21
UP	9128	2119	-197	-24	9725	730	214	793	5.43
Uttarakhand	1653	0	206	497	1076	0	-93	533	11.79
HP	873	0	-199	-314	742	0	34	3	-1.99
J&K	1489	100	-129	-4	1023	0	-64	-19	-0.36
Chandigarh	205	0	-1	-5	125	0	12	0	0.34
Total	33013	2820	-7	138	28446	730	-160	142	-0.80

* STOA figures are at sellers boundary & PX figures are at regional boundary.

III. Regional Entities :

A. NTPC	Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentout(MW)	Schedule Net MU	UI Net MU
Rihand I STPS	1000	413	450	420	9.60	400	9.84	-0.24	
Rihand II STPS	1000	933	1023	928	21.78	908	22.23	-0.45	
Rihand III STPS	500	455	463	498	10.35	431	10.86	-0.51	
Dadri I STPS	840	807	800	631	16.13	672	18.78	-2.65	
Dadri II STPS	980	906	487	737	18.04	752	21.58	-3.54	
Unchahar I TPS	420	405	400	426	9.45	394	9.66	-0.22	
Unchahar II TPS	420	400	422	437	9.36	390	9.50	-0.14	
Unchahar III TPS	210	0	0	0	0.00	0	0.00	0.00	
ISTPP (Jhajjar)	1500	995	448	335	8.00	333	8.34	-0.34	
Dadri GPS	830	795	392	408	9.05	377	9.58	-0.54	
Anta GPS	419	389	257	231	5.77	240	6.16	-0.39	
Auraiva GPS	663	627	308	315	7.29	304	7.30	-0.01	
Sub Total (A)	10782	8369	6804	6714	154.59	6441	163.71	-9.11	
B. NPC	NAPS	440	120	150	146	2.88	120	2.88	0.00
RAPS- B	440	417	458	462	10.00	417	10.01	-0.01	
RAPS- C	440	430	470	475	10.14	423	10.32	-0.18	
Sub Total (B)	1320	967	1078	1083	23.02	959	23.21	-0.19	
C. NHPC	Chamera I HPS	540	550	552	0	5.12	213	5.30	-0.18
Chamera II HPS	300	310	301	0	3.35	140	3.91	-0.57	
Chamera III HPS	231	0	0	0	0.00	0	0.00	0.00	
Bairasuil HPS	180	182	182	30	2.46	102	2.80	-0.34	
Salal-HPS	690	350	458	260	7.63	318	8.10	-0.47	
Tanakpur-HPS	94	30	32	25	0.72	30	0.75	-0.03	
Uri-HPS	480	476	478	475	11.55	481	11.63	-0.08	
Dhauliganga-HPS	280	280	278	0	1.50	63	1.89	-0.39	
Dulhasti-HPS	390	387	397	0	5.15	215	5.31	-0.16	
Sewa-II HPS	120	119	121	72	2.57	107	2.86	-0.28	
Sub Total (C)	3305	2684	2799	862	40.04	1669	42.54	-2.50	
D.NJPC	Natpda Jhakri	1500	1605	1515	0	15.74	656	15.36	0.37
Sub Total (D)	1500	1605	1515	0	15.74	656	15.36	0.37	
E. THDC	Tehri HPS	1000	530	531	0	5.83	243	6.00	-0.17
Koteswar HPS	400	300	291	0	3.00	125	3.00	0.00	
Sub Total (E)	1400	830	822	0	8.82	368	9.00	-0.18	
F. BBMB	Bhakra HPS	1480	300	297	306	7.19	300	7.20	-0.01
Dehar HPS	990	350	825	290	8.28	345	8.41	-0.13	
Pong HPS	396	10	120	0	0.32	13	0.25	0.07	
Sub Total (F)	2866	661	1242	596	15.79	658	15.86	-0.07	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	90	30	1.09	46	1.03	0.06
KWHEP HPS(IPP)	1000	0	803	291	9.00	375	8.50	0.50	
Malana Stg-II HPS	100	0	40	0	0.47	20	0.43	0.04	
Shree Cement TPS	300	0	255	259	6.24	260	6.37	-0.14	
Budhil HPS(IPP)	70	0	69	34	0.51	21	0.61	-0.10	
Sub Total (G)	1662	0	1257	614	17.31	721	16.94	0.36	
H. Total Regional Entities (A-G)	22836	15116	15517	9869	275.32	11472	286.62	-11.31	

I. State Entities	Station	Effective Installed Capacity (MW)	Peak MW	Off Peak MW	Energy(MU)	Average(Sent out MW)
Punjab	Guru Gobind Singh TPS (Ropar)	1260	1050	1051	23.64	985
	Guru Nanak Dev TPS(Bhatinda)	440	336	329	7.14	297
	Guru Hargobind Singh TPS(L.mbt)	920	928	930	20.57	857
	Thermal (Total)	2620	2314	2310	51.34	2139
	Total Hydro	1148	338	342	7.26	302
Total Punjab	3768	2652	2652	58.60	2442	
Haryana	Panipat TPS	1367	1144	1112	27.06	1128
	DCRTPP (Yamuna nagar)	600	564	560	13.09	545
	Faridabad GPS (NTPC)	432	186	156	4.01	167
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	488	372	9.33	389
	Thermal (Total)	4944	2382	2200	53.49	2229
	Total Hydro	62	26	23	0.64	27
	Total Haryana	5006	2408	2223	54.13	2256
	Rajasthan	kota TPS	1240	981	983	22.91
suratgarh TPS		1500	1140	1133	26.47	1103
Chabra TPS		500	455	453	10.73	447
Dholpur GPS		330	134	145	3.33	139
Ramgarh GPS		111	67	70	1.71	71
RAPS A (NPC)		300	205	205	4.73	197
Barsingsar (NLC)		250	111	105	2.50	104
Giral LTPS		250	118	113	2.40	100
Rajwest LTPS (IPP)		1080	597	557	13.88	578
VSLP LTPS (IPP)		135	0		0.00	0
Thermal (Total)		5696	3808	3764	88.66	3694
Total Hydro		550	0	0	0.09	4
Wind power		2191	153	288	4.66	194
Biomass		91	35	35	0.84	35
Solar		201	0	0	1.09	46
Renewable/Others (Total)		2483	188	323	6.59	275
Total Rajasthan		8729	3996	4087	95.34	3973
UP	Anpara TPS	1630	1266	1244	29.80	1242
	Obra TPS	1382	498	463	11.40	475
	Paricha TPS	890	710	703	16.90	704
	Panki TPS	210	72	63	1.60	67
	Harduaganj TPS	665	268	226	5.90	246
	Tanda TPS (NTPC)	440	396	404	9.78	407
	Roza TPS (IPP)	1200	531	532	12.83	534
	Anpara-C (IPP)	1200	860	707	19.58	816
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	365	398	8.77	366
	Thermal (Total)	8067	4966	4740	116.55	4856
	Vishnuparyag HPS (IPP)	400	109	94	2.31	96
	Other Hydro	527	86	62	1.16	48
	Cogeneration	981	800	800	19.20	800
	Total UP	9975	5961	5696	139.22	5705
Uttarakhand	Total Hydro	1303	466	387	10.27	428
	Total Uttarakhand	1303	466	387	10.27	428
Delhi	Rajghat TPS	135	103	101	2.34	98
	Delhi Gas Turbine	282	226	234	5.50	229
	Pragati Gas Turbine	330	289	267	6.47	270
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	0	0	0.00	0
	Badarpur TPS (NTPC)	705	535	500	11.40	475
	Thermal (Total)	2237	1153	1102	25.71	1071
	Total Delhi	2237	1153	1102	25.71	1071
HP	Baspa HPS (IPP)	330	30	60	1.56	65
	Malana HPS (IPP)	86	44	7	0.53	22
	Other Hydro	589	347	385	8.66	361
	Total HP	1005	421	452	10.75	448
J & K	Baglihar HPS (IPP)	450	380	374	9.05	377
	Other Hydro	323	46	93	1.40	58
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	426	467	10.45	435
Total State Control Area Generation		32979	17483	17066	404.47	16757
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1123	1837	33.52	1397
Total Regional Availability(Gross)		55815	34123	28772	713.30	29625

IV. Total Hydro Generation:

Regional Entities Hydro	10364	7311	1779	90.95	3790
State Control Area Hydro	5368	1763	1733	42.91	1692
Total Regional Hydro	15731	9074	3512	133.87	5482

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(20:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
Vindhychal B/B	100	-150	100	150	0.55	2.75	-2.21
Gwalior-Agra (D/C)	428	701	1428	0	15.19	0.00	15.19
Zerda-Kankroli	-201	-292	0	364	0.00	5.98	-5.98
Zerda-Bhinmal	-157	-241	0	374	0.00	4.49	-4.49
Malanpur-Auraiya	-118	-63	0	144	0.00	2.01	-2.01
Badod-Kota/Morak	-125	-169	0	243	0.00	3.96	-3.96
Mundra-Mohindergarh(HVDC)	951	951	954	0	22.96	0.00	22.96
Sub Total WR	878	737			38.70	19.20	19.50
Pusauli Bypass	150	150	150	0	3.36	0.00	3.36
MZP- GKP (D/C)	50	270	270	0	3.11	0.00	3.11
Patna-Balia(D/C)	173	263	330	0	4.36	0.00	4.36
B'Sharif-Balia (D/C)	-21	284	284	21	2.96	0.00	2.96
Pusauli-Balia	-203	-71	0	203	0.00	2.46	-2.46
Gaya-Fatehpur (765 Kv)	-27	141	148	87	0.92	0.00	0.92
Pusauli-Sahupuri	159	103	159	0	2.76	0.00	2.76
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-40	0	44	0.00	0.97	-0.97
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	245	1100			17.45	3.43	14.02
Total IR Exch	1123	1837			56.15	22.63	33.52

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange Shdi (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
25.87	0.50	26.38	-2.86	-10.14	1.40	-4.07	-4.92	4.92

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Inclds Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
20.00	22.09	42.09	14.02	19.50	33.52	-5.98	-2.59	-8.57

VI. Frequency Profile <----- % of Time Frequency ----->

<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.00	0.00	0.14	82.19	82.05	92.84	17.81

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
50.56	8.05	49.77	14.40	50.19	0.50	0.10	50.44	49.86

VII. Voltage profile 400 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)			
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV
Rihand	400	416	7:02	411	19:25	0.0	0.0	0.0	0.0
Gorakhpur	400	429	0:30	411	17:55	0.0	0.0	54.9	0.0
Bareilly	400	0	0:00	9999	0:00	0.0	0.0	0.0	0.0
Kanpur	400	422	8:02	407	19:26	0.0	0.0	2.4	0.0
Dadri	400	421	3:16	409	9:23	0.0	0.0	0.9	0.0
Balabhgarh	400	429	4:02	412	9:25	0.0	0.0	49.0	0.0
Bawana	400	423	4:02	408	19:13	0.0	0.0	6.8	0.0
Bassi	400	430	4:01	410	9:25	0.0	0.0	35.7	0.0
Hissar	400	415	3:30	398	19:09	0.0	0.0	0.0	0.0
Moga	400	424	3:59	406	19:12	0.0	0.0	7.8	0.0
Abdullapur	400	425	3:59	407	19:08	0.0	0.0	8.1	0.0
Nalagarh	400	429	3:59	405	19:13	0.0	0.0	12.0	0.0
Kishenpur	400	424	3:17	403	19:12	0.0	0.0	10.0	0.0
Wagoora	400	415	3:51	390	19:51	0.0	0.0	0.0	0.0

VIII. Voltage profile 765 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)			
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV
Fatehpur	765	776	8:03	747	19:26	0.0	0.0	0.0	0.0
Balia	765	767	0:42	730	17:53	0.0	24.5	0.0	0.0
Moga	765	789	3:53	755	19:12	0.0	0.0	0.0	0.0
Agra	765	798	4:02	766	19:25	0.0	0.0	0.0	0.0
Bhiwani	765	794	3:52	763	19:11	0.0	0.0	0.0	0.0
Unnao	765	763	8:03	740	19:25	0.0	1.2	0.0	0.0

IX. Reservoir Parameters:

Name of Reservoir	Parameters		Present Parameters		Last Year		Last day	
	FRL (m)	MDDL (m)	Level (m)	Energy (MU)	Level (m)	Energy (MU)	Inflow (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	478.53	427.60	474.67	345.61	325.98	217.27
Pong	426.72	384.05	400.19	223.85	403.05	288.96	51.06	21.66
Tehri	829.79	740.04	767.10	175.00	818.65	982.26	53.49	173.00
Koteshwar	612.50	598.50	607.80	2.88	611.50	5.20	173.00	199.00
Chamera-I	760.00	748.75	756.80	NA	NA	NA	140.29	138.53
Rihand	268.22	252.98	257.40	175.00	259.11	257.10	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.94	NA	NA	NA	NA	NA
RSD	527.91	487.91	506.81	NA	496.38	NA	96.08	142.52

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 15.04.2013 :

1.Normal weather.

XIII. Synchronisation of new generating units :

XIV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :

XV. Tripping of lines in pooling stations :

XVI. Complete generation loss in a generating station :

Report for : 15.04.2013

पारी प्रभाती अश्विनी / SHIFT CHARGE ENGINEER